



88077678

BLM ALASKA

## FRONTIERS

Issue 105 • Winter 2008

News about BLM's National System of Public Lands in Alaska

BLM

Alaska



Craig McCaa

## What's Inside...

- 2** 2008 Environmental Award for East Teshekpuk Remediation Team  
American Dipper
- 3** Barrow Students Experience Ivotuk Science Field Camp
- 5** Pulling Hard for BLM
- 6** Cure Your Winter Blahs
- 7** Excited About Planning? You betcha!
- 8** Four Land Use Plans
- 10** LBJ's Role in Alaska History
- 11** Get Outdoors
- 12** A Treasure Trove of Resources
- 13** Frontiers Flashes
- 15** Subscription form

## Back Cover

Alaska Dinosaurs Credits

## A Cabin of a Different Sort



Construction of the cabin inside the new Cultural and Visitors Center.

Over the years the outdoor recreation planners of BLM's Eastern Interior Field Office have weathered tough working conditions while building 11 public-use cabins in the agency's White Mountains National Recreation Area. They've faced clouds of mosquitoes, sudden downpours, smoke from wildland fires, roaring generators, and lightning. They've baked under the intense afternoon sun and toiled through frosty mornings with numb fingers and toes.

It's these challenges — or the lack thereof — that made their latest work site stand out from the rest. The crew worked in tee shirts even as snowflakes fell from the sky. They drove home every night to sleep in their own beds. Electrical power for tools was as close as the nearest wall outlet.

In late October, the field office's crew of nine completed construction of a full-sized White Mountains cabin inside the exhibit hall of the new Morris Thompson Cultural and Visitors Center in downtown Fairbanks. The striking, contemporary building on the banks of the Chena River is now the home of Fairbanks' Alaska Public Land Information Center (APLIC), in which the BLM is a partner agency.

APLIC is working with the Tanana Chiefs Conference to fill 8,000 square feet of exhibit space that will feature the natural history, lifestyles, cultural heritage and recreational opportunities of Interior Alaska.

One highlight of the exhibits will be the log cabin, placed in front of a large mural painted by artist Jan Vriesen. Visitors who walk through the cabin and peer out its windows will look upon a wintry scene that includes a dog sled, a wandering moose, a frozen lake



Exterior of the new Morris Thompson Cultural and Visitors Center, Fairbanks, Alaska.

— continued on page 4



# 2008 Environmental Award for East Teshekpuk Legacy Well Remediation Team



Original by Department of the Interior/BLM

(left to right) Marsh Creek, LLC, contractor representative Bryan Lund, Project Director Wayne Svejnoha, and BLM-Alaska Deputy State Director for Resources Ted Murphy receiving the 2008 U.S. Department of the Interior Environmental Achievement Award. (Photo illustration by BLM-Alaska)

On schedule and under budget, the BLM completed cleanup of the East Teshekpuk Lake legacy well site in the National Petroleum Reserve-Alaska, one of the most productive, diverse and sensitive wetlands ecosystem in the American Arctic. In December, team members received the 2008 U.S. Department of the Interior Environmental Achievement Award at a ceremony in Washington, D.C. The team included Arctic Field Manager Lon Kelly, Project Manager Wayne Svejnoha, and BLM-Alaska employees Susan Flora, Mike Kunz, Mike Worley, Greg Noble, Tom Zelenka and Tim Lawlor; and the contractor, Alaska Native-owned Marsh Creek, LLC, of Anchorage and Kaktovik.

The award recognizes the team's outstanding work, innovation, and project coordination to remediate the well site and protect critical habitat. The contractor removed and

recycled over 9,000 gallons of diesel and 225,000 pounds of scrap metal; and removed and disposed of 3,800 cubic yards of contaminated drilling mud and cover material. Innovative solutions were implemented to finish the project on time and under budget, resulting in a savings to the government of over \$3 million.

The remediation team overcame seasonal drought conditions limiting water availability, extreme cold temperatures causing continual equipment breakdowns, and an unseasonable warming trend that impacted ice road stability. Remediation projects on the North Slope are usually done during the winter months to minimize impacts to the tundra, provide site access via ice roads, and ensure protection of wildlife in the area. The design of the contract, project and disposal plans will serve as a template for future remediation efforts on the North Slope.

## American Dipper: Alaska's year- round songbird

Not all songbirds fly south for the winter. North America's only aquatic songbird, the American Dipper (shown below), lives year-round in Alaska and some of the Dippers live on BLM-Alaska's Campbell Tract, a 730-acre forested area in Anchorage.

The American Dipper is easy to identify by its constant up-and-down bobbing motions, as well as from observing its short stubby tail, rounded wings and even-gray color — that is, unless the bird blends into the rocky shoreline as it forages for aquatic insects, larvae, fish eggs and small fish.

Dippers inhabit open water edges where it dives for food, swims completely underwater, and even walks on the creek bottom. The species has adapted to survive severe arctic winter conditions by developing extra oxygen-carrying capacity in its blood, a low metabolic rate and a thick coat of feathers. In addition, it has a special eye membrane so it can see underwater, and scales cover its nostrils to prevent water from entering while it dives into the swift-flowing waters the Dipper prefers.

The birds build a dome-shaped nest from grass and moss. At Campbell Creek, Dippers nest in the trestles under the BLM's bridge, where the birds are protected from natural predators. The female incubates a typical clutch of three to six chicks; incubation time ranges around two weeks.

American Dippers live in the West and range as far south as Panama and as far north as the treeline along the cold margins of boreal forest in Alaska.

— Pam Eldridge  
[pam\\_eldridge@blm.gov](mailto:pam_eldridge@blm.gov)



Pam Eldridge





# Barrow Students Have a Summer to Remember

## Ivotuk Science Field Camp



BLM Arctic Field Office

(back row) Jean Schaeffer (BLM Camp Manager), Randy Bordeaux (student), Tommy Nageak (Ilisagvik College representative), Joseph Okakok (student), Michael Kunz (BLM Archaeologist/Science Camp Coordinator) and Jim Ivanoff (bear guard)  
(front row) Joycelyn Ivanoff (student), Kimberly Neakok (student) and Dominique Nayukok (student).

Last summer, five lucky college-bound students participated in a BLM-sponsored science field camp at Ivotuk on Alaska's North Slope. The BLM Arctic Field Office coordinated the camp with Ilisagvik College for students interested in understanding the BLM's role in protecting subsistence resources and activities, land status, and oil and gas exploration and development.

From July 30 to Aug. 6, 2008, the BLM staff led lectures, discussions and hands-on field activities about archaeology, paleontology, natural resource management, cultural resource management, oil and gas exploration, aviation/logistics, and global positioning technology. From excavating Paleo-Indian archaeological sites dating between 7,000 and 12,000 years old, to checking out a test well within the National Petroleum Reserve-Alaska while discussing oil and gas exploration issues, this was an experience the field camp students won't soon forget.

The field camp's participants included Kimberly Neakok of Point Lay, Dominique Nayukok and Randy Bordeaux of Atkasuk, and Joycelyn Ivanoff and Joseph Okakok of Barrow. Okakok had planned to take business and management at Ilisagvik College this year. Par-

ticipating in the BLM field camp changed all that. By the time the camp ended, Okakok decided to switch his major to an associate degree program as the first step toward a four-year degree in land management. He will also be participating in a Spring 2009 internship with the BLM. Okakok says while at the field camp, he discovered his passion for the land he lives on.

Ivotuk lies at the southeastern edge of the National Petroleum Reserve-Alaska, about 195 miles south of Barrow. Surrounded by low arctic tundra, Ivotuk is west of the Ivotuk Hills, between the Colville River and the Brooks Mountain Range near the east fork of the Etivluk River. Once a drill site in the petroleum reserve, today Ivotuk is a small research site supporting an autonomous research platform that transfers scientific data to researchers at their home institutions around the United States in near real-time. The site has an airstrip, short gravel road to Otuk Creek, and a small compound with a cabin operated by the BLM.

BLM Arctic Field Office staff included Mike Brandau, Mike Kunz, Francis Macalady, Ben Nageak, and Jean Schaeffer. Tommy Nageak represented Ilisagvik College as stu-

dent advocate, and Jimmy Ivanoff from the U.S. Department of Energy was the 'bear guard.'

Tommy Nageak said the camp "gave the students, including myself, a more in-depth and detailed look at the issues we are facing with the energy crisis that is ongoing today, especially within the reserve. The BLM staff was great, and I hope to see more of these summer camps every year to entice North Slope students to get more involved in the future decision-making about our lands."

— Staff from Ilisagvik College contributed to this article.



Jim Ivanoff and Ben Nageak at Mesa Site.

BLM Arctic Field Office





## Cabin — continued from page 1

and a nighttime sky complete with Northern Lights.

APLIC's exhibit coordinator Pam Rice said that including a White Mountains public-use cabin helped meet two important exhibit objectives: to explain local lifestyles and to promote winter attractions to visitors.

"We're trying to show that winter is the time you can really get out and enjoy Alaska," Rice said. "Everything's frozen, there's a blanket of snow, and you can go just about everywhere."

BLM carpenter Kent Davis, who headed the construction crew, said the new cabin was built log by log using the same methods and materials as the White Mountains recreation cabins.

Those who have visited the White Mountains will recognize the cabin's interior furnishings as well. The sturdy picnic table and benches evoke hearty dinners and spirited games of Yahtzee by lantern light after a long day of skiing or snow-machining.

Although the cabin's indoor location made a foundation, vapor barrier and insulation unnecessary,

the new structure has a few features not found in the White Mountains cabins.

"We're wiring the cabin for the speakers, motion sensors, and other electronic equipment that will be part of the exhibit," Davis said. "And that wiring has to be hidden from view."

Even the woodstove will be wired. An electronic device inside the stove will replicate the crackling noises and orange glow — if not the warmth — of a real fire.

The new exhibits should be open to the public by mid-May 2009, in time for the summer tourist season.

— Craig McCaa  
Craig\_McCaa@blm.gov



Building the wall of the cabin against realistic wintery backdrop.

Craig Mcaa

## New to Fairbanks: The Morris Thompson Cultural and Visitors Center

*"There is a place in Interior Alaska where two great rivers meet; the Yukon and Tanana ... The Alaska Natives have named the place Nuchalawoyya, meaning simply 'where the two rivers meet.' On some high ground that overlooks this place is the grave of a great Alaska visionary, Morris Thompson. His untimely death some years ago took from all Alaskans a man who evoked trust and confidence from all he touched."* ~ Mark Hamilton, President of the University of Alaska, 2004

Morris Thompson was a cabinet member of Governor Hickel's administration and was deeply involved in the Alaska Native Claims Settlement Act. He became the youngest Commissioner of the U.S. Bureau of Indian Affairs, served as a leader in the Alaska Federation of Natives and Commonwealth North, and later became President and Chief Executive Officer of Doyon, Limited. He was the inspiration for the Morris Thompson Cultural and Visitors Center, where Native and non-Native people can work together to build Alaska's future.

The Center is home to:

- Alaska Geographic Store
- Alaska Public Lands Information Center (APLIC)
- Fairbanks Convention and Visitors Bureau
- Tanana Chiefs Conference cultural programs
- Denakkanaaga, the regional Alaska Native Elders organization

The Center provides visitor information, trip planning services, a theater, an artisans workshop and demonstration area, a gathering area for elders, cultural and environmental classrooms, and an outdoor recreation space. Free films show daily at 10 a.m., noon, and 2 p.m. New exhibits will be unveiled in May 2009. Morris Thompson cultural and Visitors Center, 907-459-3700, 101 Dunkel Street, Fairbanks, Alaska. Winter hours 8 a.m. to 5 p.m. daily, and summer hours 8 a.m. to 9 p.m.



Interior of the new Morris Thompson Cultural and Visitors Center, Fairbanks, Alaska.

Craig Mcaa



# Pulling Hard for the BLM



Pam Eldridge

When Kentucky Wesleyan College student Rehanon Pampell told the Chicago Botanic Garden that her first choice for an internship was to study invasive plants in Fairbanks, Alaska, the response couldn't have surprised her more: "You're not going to believe this, but we actually have an opening in Fairbanks..."

It turned out that the BLM's Eastern Interior Field Office biologist Ruth Gronquist was looking for help on several invasive plant projects. Pampell was soon headed north with her fiancé, now husband, whom the Army was transferring to Fort Wainwright in Fairbanks.

Pampell, who graduated last spring with a bachelor's degree in biology, received one of nearly 60 Conservation and Land Management fellowships awarded each year by the Chicago Botanic Garden, according to program manager Krissa Skogen. Funding from the BLM helps the garden place college graduates in five- to ten-month paid internships where they receive

hands-on experience assisting BLM botanists and biologists.

Pampell's major field project, invasive plant control on BLM lands along the Dalton Highway, couldn't have been more hands-on — she was pulling weeds right out of the ground. (See "Invasive Weeds in Alaska," *Frontiers*, Fall 2008).

She also worked on a joint study between the BLM, NASA and the National Park Service to 'ground-truth,' or verify, a computer model designed to predict how invasive plants spread into areas burned by wildland fires.

"I had a data sheet and I was out there looking for three different invasive species. We were looking at what was occurring along the [Dalton Highway] and then on 50-meter transects in a burned area."

Although a University of Alaska Fairbanks graduate student doing similar work had found several invasive plants the previous year, Pampell had no such luck. "I found one plant, and I surveyed over a hundred points."

Not finding invasive plants is usually considered positive news, but in this case it also means that the predictive model probably needs further refinement, Pampell says. "That's what they're looking into. What is it exactly that's preventing or encouraging these plants to grow in there?"

When Pampell was not in the field assisting Gronquist with monitoring and controlling invasive plants, she broadened her experience in natural resource management by helping on numerous projects ranging from trail maintenance in the White Mountains National Recreation Area to honing skills on federal environmental review processes.

The BLM extended her internship so she could help not only with

the field work but with developing strategies for invasive species management.

"I got to help Ruth look at the data that she's collected over the past four years," Pampell says. "I helped her analyze that and develop GIS map layers from the data. Now we've just finished developing the draft Dalton Highway Weed Management Plan."

"It's a lot of responsibility that I wasn't expecting. It's intimidating but I'm learning a lot," she says. "People have been willing to take the time to sit down with me and help me out."

The Conservation and Land Management internship program is an outstanding, mutually beneficial program, according to Gronquist.

"The program provides the cream of the crop of recent college graduates," she says. "The BLM mentors and provides natural resource management experience for the interns, and the interns bring enthusiasm and contribute to data collection and analysis for priority projects. I'm encouraging all staff biologists to consider mentoring an intern."

"Rehanon has been willing and able to take on any challenge and complete it exceptionally well. She will be missed by all at Fairbanks District Office."

Pampell says her BLM internship, which ends in February, has reinforced her interest in a career in natural resource management. She hopes to pursue a master's degree in entomology at the University of Alaska Fairbanks and possibly work for the BLM again.

— Craig McCaa

[Craig\\_McCaa@blm.gov](mailto:Craig_McCaa@blm.gov)



Ruth Gronquist

Rehanon Pampell pulls two huge bushes of white sweet clover, *Melilotus alba*, four feet in height.





## Cure Your Winter Blahs at the WHITE MOUNTAINS NATIONAL RECREATION AREA

Got the winter blahs? There's no better cure than visiting one of 11 public recreation cabins in the one-million-acre White Mountains National Recreation Area. Situated among spruce forests and craggy limestone peaks, the cabins are popular with locals and visitors alike, with around 800 nights rented annually.

Each cabin includes a wood-stove, bunks, a table and benches, a propane lantern and a cookstove. Although an ax and saw are provided, you will need to supply your own firewood. On your brief walk to the cabin's outhouse, you'll have an excellent opportunity to view the Northern Lights!

Connecting the cabins are more than 240 miles of groomed, multi-use winter trails. Depending on your experience level and length of trip, you can choose from cabins that are 7 to 32 miles from the nearest trailhead on either the Steese or Elliott highway. In the heart of the White Mountains, cabins are conveniently located on several loops that make excellent multi-day trips whether you're traveling by dog sled team, skis, snowshoes or snowmachine. Not interested in leaving the roads

behind? Try the Fred Blixt Cabin, only a few hundred yards from the Elliott Highway.

You can reserve a cabin up to 30 days in advance by visiting the BLM Public Information Center at 1150 University Avenue in Fairbanks, or by calling the center at (907) 474-2251 or 1-800-437-7021 if you are using a credit card. Reservations cost \$25 per night and are limited to three consecutive nights per cabin. Weekends, holidays, and spring breaks are peak use times, so make your reservation early!

Before departing on your trip, check the weekly trail conditions report on the White Mountains Web site (see below) or call the recorded message at (907) 474-2372.

— Craig McCaa  
[Craig\\_McCaa@blm.gov](mailto:Craig_McCaa@blm.gov)

### At a Glance

**Cost per night:** \$25

**Phone number for reservations:**  
(907) 474-2251 or 1-800-437-7021

**Updates on trail conditions:**  
(907) 474-2372 or the White Mountains Web site.

### Your Money Working for You

Recent visitor use surveys show that White Mountains visitors feel satisfied that they're getting a good value for the cabin reservation fees. Some of that satisfaction may come from knowing that BLM-Alaska uses the fees to maintain and improve facilities in the recreation area. The Federal Land Recreation Enhancement Act, passed in 2004, authorized local offices of federal agencies to retain fees collected in areas they manage. The White Mountains National Recreation Area brings in between \$20,000 and \$25,000 per year, according to outdoor recreation planner Collin Cogley. About 85 percent of that money comes from winter rentals of cabins; summer campground fees and recreation permits make up the rest. Cogley says the BLM Eastern Interior Field Office has used collected fees to construct Eleazar's Cabin and the Summit Trail Shelter, replace the Crowberry Cabin, repair Wolf Run Cabin, and improve White Mountains trails, campgrounds and roads.

[http://www.blm.gov/ak/st/en/prog/sa/white\\_mtns.html](http://www.blm.gov/ak/st/en/prog/sa/white_mtns.html)



# EXCITED ABOUT LAND USE PLANNING? **You betcha!**

"I love it when a plan comes together!" Jolie Pollett, BLM-Alaska's Planning and Environmental Coordinator exclaims, borrowing a quote from the "A-Team" television classic. A self-professed "planning nerd," Jolie admits she likes having a hand in the BLM's land use planning process and feels it helps the public to build trust in the BLM and its land management practices. The plans guide land managers on how to make tough decisions about the land's resources.

An ecologist by training, Jolie says ecology is a holistic discipline, like planning. As an ecologist, she participated in preparing land use plans and found she was good at it. She also discovered many people do not have the desire to plod along developing plans that take years to compile and contain different types of decisions.

Jolie enjoys synthesizing volumes of information (see photo) about all of the different resources and uses the BLM manages on public lands. Planners pull the information together, apply the many different aspects of public land management, look ahead to the future to identify and solve problems, and work to present the best ways to manage the lands for the next 10 to 20 years. She equates the process to those used by municipalities in "city planning."

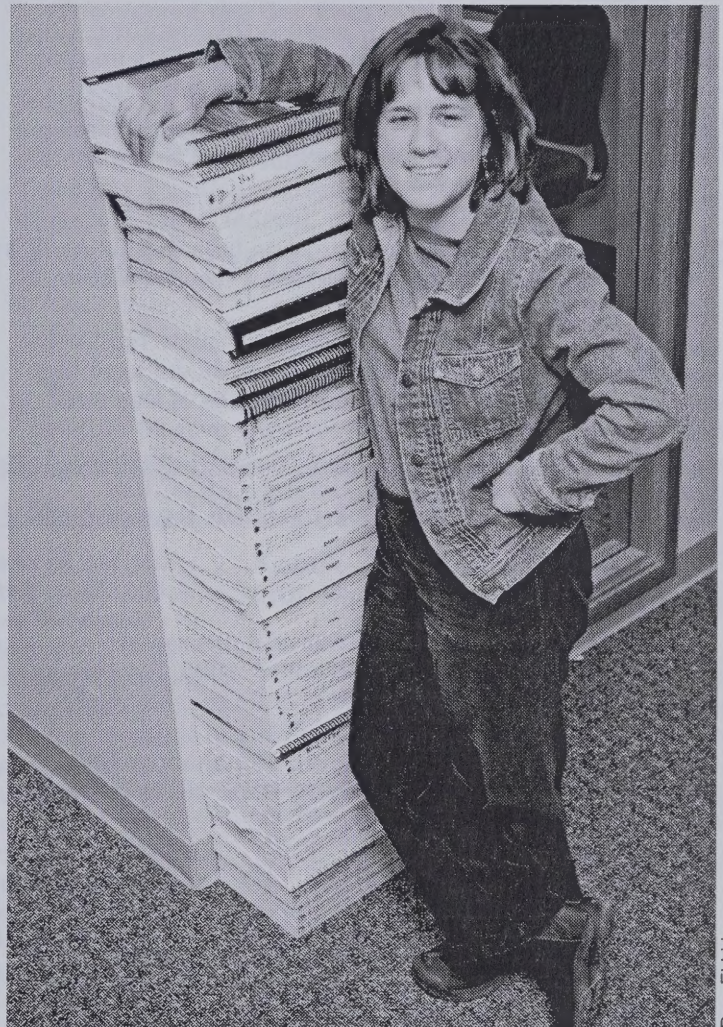
---

"[Your] input helps us make better decisions that will affect the American people for many years to come."

---

Jolie explains that it is always a challenge to present so many different types of information in a way that is clear and easy to follow. The plan becomes the "user's guide" for managers and the public regarding effective use of resources and protection of values on public lands. These plans identify what uses and activities are appropriate on the lands. The decisions made in the plans work toward sustainability. Land use plans can affect where different types of recreational use can occur, identify routes of travel across public lands by various modes of transportation, establish areas where miners may stake claims and areas where companies can explore for natural gas, identify methods of protecting endangered species, and identify unique ecosystems and how best to protect their features.

Jolie's role is to coordinate the land use plans and amendments that BLM-Alaska develops. She works to ensure consistency in planning decisions across Alaska. She helps keep the plans on-track and within budget. She also checks to make sure the plans make all of the decisions that BLM is required to make (fulfilling policy requirements). It takes a long time to compile all the



Pam Eldridge

**A tower of work — Jolie Pollett, Planning and Environmental Coordinator in the BLM-Alaska state office, stands next to a stack of BLM's current land use plans, many have three or more volumes for one plan. 2008 was a busy year for the planning staff.**

background and supporting information needed to make decisions and land use allocations, and many of BLM-Alaska's plans fill more than one volume.

Because the BLM manages such large areas, especially in Alaska, Jolie knows it is critical that the agency hear from the public and stakeholders about the best ways to manage for multiple-use and sustained yield. She says, "The public helps us identify areas that would benefit from special protection, or areas that are most valuable for development (such as oil/gas leasing, geothermal energy exploration, or mining). We need people to tell us how and where they like to recreate — this helps us define recreation zones. Alaska Natives share

— continued on page 8



valuable information about their traditional practices and advise us on how BLM-Alaska can best preserve those practices on public lands. These are just some of the ways others make positive contributions to public land management. This input helps us make better decisions that will affect the American people for many years to come.”

The documents are lengthy because they require analysis of various ways of managing lands. This analysis tells the land manager which decisions to finalize in the land use plan and ensures the BLM is managing lands for the best use. Obviously, not everyone can agree

on the best use of public lands, but the land manager must sift through the data to make the best-informed decisions, which are rarely easy decisions.

When the signing of the Record of Decision signals the completion of the planning process, Jolie smiles as she admits it's a reason to celebrate. These plans can take three or four years to complete, but they will guide managers for many years to come. “It's not easy to put an expiration date on a land use plan, but typically we work under a land use plan for 15 or 20 years or more unless conditions change.”

It's clear that for Jolie Pollet, land use planning is more than a job, it's a passion.

## Four Alaska Land Use Plans Approved in 2008

Considering the lengthy process to complete land use plans, 2008 was a notable year for BLM-Alaska land use planning. The agency released four Records of Decision (RODs)/Approved Plans in 2008 covering over 20 million acres of BLM-managed lands. Most recently approved is the Bay Plan, covering approximately 1.9 million acres within the Bristol Bay and Goodnews Bay areas of southwest Alaska.

### The Bay Plan

The BLM released the Bay ROD and Approved Resource Management Plan on Nov. 14, 2008. Decisions include goals and objectives, land use allocations, and management actions for the public lands in the Bay Planning Area managed by the BLM's Anchorage Field Office. Most objectives are long-range and will take from 10 to 50 years to achieve. Some of the major decisions in the Bay Plan include:

- ▶ Recommend revocation of all ANCSA section 17(d)(1) withdrawals, which would open 1.1 million acres to mineral leasing or mineral entry.
- ▶ Subject 1,834 acres of sensitive aquatic habitat to No Surface Occupancy and 300-foot setbacks.
- ▶ Designate the 36,220-acre Carter Spit as an Area of Critical Environmental Concern to protect Steller eider (a threatened species) habitat.
- ▶ Manage lands in the planning area as a Semi-Primitive Motorized recreation area and as an Extensive Recreation management area.
- ▶ Limit off-highway vehicle (OHV) use to existing trails (except for subsistence use of OHVs). Allow snowmachines to open, cross-country travel when there is adequate snow cover.

In the final Bay Plan, the BLM addresses comments from citizens concerned that the proposed Pebble Mine project poses risks to the environment, especially salmon habitat. Southwest Alaska is home to the most productive fisheries in the world. Salmon is the single most important subsistence food in the planning area and an extremely valuable commercial export.



Pam Eldridge

**Planning Writer-Editor Caron Gibson holds the Approved Bay Resource Management Plan and Record of Decision.**

The site of the Pebble project, a proposed open-pit copper and gold mine under exploration by Northern Dynasty Mines, Inc., is on State land 30 miles northeast of the nearest BLM-managed land. The BLM has no jurisdiction on State land. Although the Pebble project is only a proposal at this time, the BLM analyzed potential impacts to BLM-managed public lands from the Pebble

— continued on page 9



## Approved — continued from page 8

project and other potential development on adjacent lands. This analysis of potential cumulative effects was included in the Bay Plan. Should any lands under BLM jurisdiction be disturbed due to mining operations, the BLM would require Plans of Operation that would include restoring soils and vegetation to their pre-mining condition.

### Bay Plan—What Happens Next?

Now that the plan is approved, the BLM will begin its implementation. Actions will include an inventory and assessment of resources such as soils, Steller eider habitat, and cultural and paleontological resources. The BLM will prepare detailed land and legal records to support the ROD's recommendation to revoke ANCSA section 17(d)(1) withdrawals.

Should the level of exploration and development significantly exceed what is in the current Reasonably Foreseeable Development scenarios in the Bay plan, the BLM would amend the plan and include public participation as part of that process. Any plan

amendment would comply with the requirements in the National Environmental Policy Act (NEPA).

### Getting Involved

This spring, the BLM will open a Dillingham field station to maintain a presence in the Bay planning area. (See "Dugan Nielsen: BLM's Bristol Bay Connection," *Frontiers*, Fall 2008.)

Throughout the Bay Plan's implementation, the BLM will continue to actively involve the public, using news releases and mass mailings to ask for participation and provide information about new and ongoing implementation planning, site-specific or project planning and opportunities and timeframes to comment. The BLM will also continue to coordinate with the numerous state, federal, tribal, and local agencies and officials interested and involved in the management of BLM public lands in the Bay Planning Area.

— Caron Gibson  
caron\_a\_gibson@blm.gov

## Other BLM Plans Completed and Approved Within the Last Year

### Ring of Fire

(ROD signed in March 2008)

The Ring of Fire Resource Management Plan covers 1.3 million acres of BLM-managed public lands in Southeast and Southcentral Alaska and the Aleutian Islands. The Ring of Fire Plan designates two Special Recreation Management Areas (SRMA) for the Knik River and the Haines Block. It also designates the Neacola Mountains as an Area of Critical Environmental Concern (ACEC). The BLM will re-evaluate the ACEC designation for the Haines Block. The BLM will defer the determination of suitability for 14 eligible Wild and Scenic River segments until land ownership in the planning area is better defined. As with the Bay Plan, the BLM recommends revocation of the existing ANCSA Section 17(d)(1) withdrawals within the Ring of Fire planning area.

### Northeast National Petroleum Reserve—Alaska (NPR-A) (ROD signed in July 2008)

In July 2008 the BLM released the Record of Decision (ROD) for the Northeast National Petroleum Reserve—Alaska (NPR-A) Supplemental Integrated Activity Plan (IAP)/Environmental Impact Statement (EIS). The ROD for the Northeast NPR-A Supplemental IAP/EIS designated approximately 4 million acres

immediately available for oil and gas leasing. It defers leasing on 430,000 acres north and east of Teshekpuk Lake for 10 years, and makes 219,000 acres of Teshekpuk Lake and its islands unavailable for oil and gas leasing. The Supplemental IAP/EIS addresses the cumulative effects of leasing in response to concerns of the District Court. Those concerns arose after release of an amendment to the NPR-A Plan in 2005. The Supplemental IAP/EIS also establishes performance-based stipulations and required operating procedures. It requires studies and monitoring. The U.S. Fish & Wildlife Service told the BLM that proposed activities in the planning area would not jeopardize listed and proposed species under the Endangered Species Act, including the polar bear, listed as "threatened" in May 2008.



Polar Bear.

### Kobuk-Seward Peninsula

(ROD signed in September 2008)

The approved Kobuk-Seward Peninsula Resource Management Plan recommends revocation of all ANCSA Section 17(d)(1) withdrawals, and will make up to 11.9 million acres of BLM-managed public lands and mineral estate available to mineral leasing and locatable mineral entry. The Approved Plan also designates six Areas of Critical Environmental Concern: Nulato Hills ACEC (1,080,000 acres); Shaktoolik River ACEC (234,000 acres); Ungalik River ACEC (264,000 acres); Inglutalik ACEC (466,000 acres); Western Arctic Caribou Insect Relief ACEC (1,529,000 acres); and Mount Osborn ACEC (82,000 acres). The Approved Plan identifies two Special Recreation Management Areas — the Squirrel River SRMA and the Salmon Lake-Kigluaik Mountains SRMA. The BLM designated the Squirrel River SRMA in response to current user conflict in the area and will develop a SRM Plan for the area within three years. Meanwhile, the BLM is implementing interim management until the conflicts can be resolved.

Karen Laubenstein







# Journey into Alaska's Past

with *BLM-Alaska Archaeologist Robert King*

## LBJ's Role in Alaska's History



**President Lyndon B. Johnson.**

In an earlier issue of *BLM Alaska Frontiers*, I told the little-known story of President Andrew Johnson's important role in supporting the purchase of Alaska in 1867. It coincided with the 200th anniversary of his birth in 2008. Now, with 2008 coincidentally marking the centennial of the birth of our other President Johnson, Lyndon Baines Johnson (1908-1973), known to many Americans as 'LBJ,' it is fitting to tell LBJ's equally little-known importance in Alaska's history, both leading up to Statehood in 1959 and afterward.

As a supporter of President Franklin Roosevelt's "New Deal," Democrat Lyndon Johnson was first elected to the U.S. House of Representatives from Texas in 1937 and then to the U.S. Senate in 1948. Thereafter, he served as a Texas Senator from 1949 until becoming Vice President of the United States with the inauguration of John F. Kennedy as President in January 1961.

During his years in the Senate, LBJ's genius for political strategy and tactics earned him the coveted post of Minority Leader in 1953 (the

youngest to hold that post in Senate history) and then Majority Leader in 1955 when the Democrats gained a majority in the Senate. That meant that by the early to mid-1950s, when the final struggle for Alaska statehood was underway, Johnson was one of the most powerful figures in Washington, D.C. Without his support, the Alaska Statehood Act would not have passed the Senate in 1958 and been signed by President Eisenhower on July 7, 1958.

One of the reasons statehood for Alaska had been blocked in the past was the fear by some in Congress that Alaska would immediately elect Democrats to both new Senate seats and to the one seat in the House of Representatives (which did happen). Republicans didn't like this prospect, so it took a compromise to un-jam the stalled road to Alaska statehood. The solution was to link the admission of the other territory wanting statehood, Hawaii, to Alaska statehood. Some thought that Hawaii would elect all Republicans to Congress (the opposite of Alaska) and consequently the balance of power in Congress would not shift if Hawaii became a state at virtually the same time. (Hawaii achieved statehood on Aug. 21, 1959.)

Bob Bartlett, the non-voting Alaska Delegate who had tirelessly lobbied Congressmen and everyone else in power to favor Alaska statehood, found LBJ supportive. Indeed, Johnson made a very important commitment to Bartlett that to the best of Johnson's ability, the Alaska Statehood bill would not be filibustered by certain senators, including recalcitrant southern Democrats, who had sometimes dubious and self-serving reasons to oppose Alaska's statehood. These reasons varied from fear by Washington's senator that his state's fishing fleets would lose control of some Alaska fisheries, to others that important Cold War Era military defense

facilities couldn't be managed as effectively by the military, or those who thought statehood would be "too expensive."

Yet, steady talking by Bartlett and others, plus steady prodding in the Senate by Johnson, plus growing support in the House of Representatives ultimately won the day, and the Alaska Statehood Act passed!

Critically important, too, by January 1958 President Eisenhower reversed his position on Alaska's status. He fully endorsed Alaska statehood for the first time. Thus, in 1958, all of the "ingredients" finally came together: Congress passed and President Eisenhower signed the Alaska Statehood Act in July, and on Jan. 3, 1959, President Eisenhower signed the official declaration that made Alaska the 49th state.

But Lyndon Johnson's support for Alaska didn't end there.

In May 1966, as President of the United States, LBJ wrote to Alaska's first governor, William Egan (1914-1984). LBJ informed Egan that, under his administration, a last major step in the transition to Alaska's statehood had taken place. It was the signing of deeds conveying the airports at Nome, Northway, Umiat, Summit, Gulkana, Cold Bay, Bettles and Cordova to the State of Alaska. That action completed the transfer to Alaskan ownership of twenty-one small airports previously owned by the United States and operated by the Federal Aviation Agency. With that action and support by President Johnson, Alaska achieved a major milestone in gaining control over its own infrastructure and becoming the state it is today.

On Nov. 1 and 2, 1966, President and Lady Bird Johnson visited Alaska briefly on their way back from a 17-day tour of the Pacific and Asia. Their trip had included the battle zone of Vietnam, a war that was increasingly eroding his Presidency.

— continued on page 11



## 

LBJ took the opportunity during an overnight stop in Anchorage (staying at what today is the Hilton Anchorage Hotel) to sign two bills into law that affected Alaska's important fishing and fur-seal industries. As he addressed the gathered crowd, some who listened gratefully remembered his prior support for Alaska leading up to statehood. Others who heard him, like most people today, had no idea that this man had once aided Alaska's drive to become America's largest state — a decade before he became the 36th President of the United States.

Happy Birthday, LBJ.

— Robert King  
 robert\_king@blm.gov



Yoichi Okamoto

Lady Bird and Lyndon Johnson dancing at their daughter Lynda's wedding reception at the White House in 1967.

## 

Why does it seem children no longer go outside to play as they once did? How can the BLM and other agencies help reconnect children to the environment?

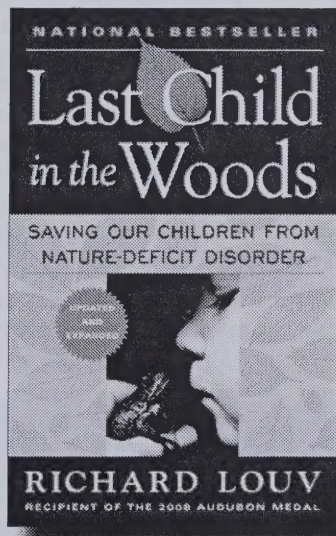
These are some of the questions federal, state, and nonprofit partners asked and discussed at a working summit held Dec. 10-11, 2008, in Anchorage at the Dena'ina Civic and Convention Center. BLM-Alaska is a member of the sponsoring Get Outdoors, Anchorage! Steering Committee.

Anchorage District Manager Gary Reimer, on behalf of BLM-Alaska, signed the "Anchorage Children's Outdoor Bill of Rights," along with Mayor Mark Begich and the other partners present. The partners agreed to "defend the right of all children and every family to play outdoors" and to support opportunities for kids to explore nature, fish, camp, bike, and engage in other outdoor activities.

The summit featured keynote speakers from the Children and Nature Network (<http://www.childrenand-nature.org>), a group formed by Richard Louv after his book, *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*, was published in 2005. More than 100 participants drafted a set of strategies and action items to connect Anchorage youth to nature and the outdoors.

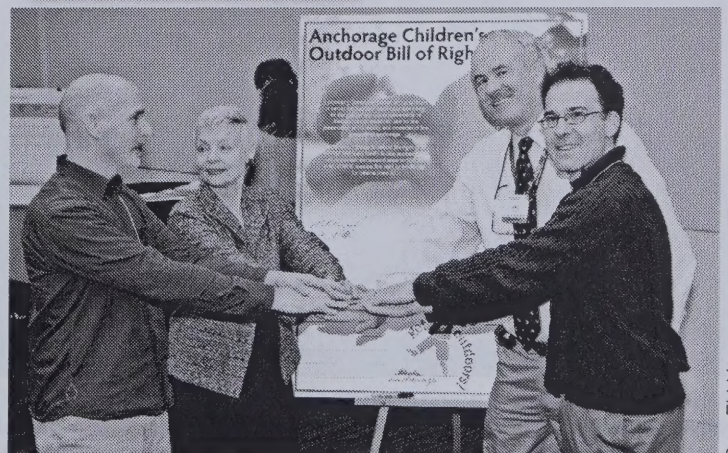
Each year the BLM's Campbell Creek Science Center provides outdoor educational programs to more than 45,000 local residents, the majority of them school children.

— Teresa McPherson  
 teresa\_mcpherson@blm.gov



(left) *Last Child in the Woods* by Richard Louv.

(below, left to right) Tom Burek, Alaska Center for the Environment, is head of Trailside Discovery Camp; Friends of the Campbell Creek Science Center Chair Joette Storm; Anchorage District Manager Gary Reimer; and Campbell Creek Science Center Director Jeff Brune at the signing of the Anchorage Children's Outdoor Bill of Rights.



Pam Eldridge



# ARLIS

## A Treasure Trove of Resources



Pam Eldridge

ARLIS, Room 111, Library Building 3211 Providence Drive, Anchorage, AK 99508 • 907-272-7547

The Alaska Resources Library and Information Services (ARLIS) is tucked inside the University of Alaska Anchorage/Alaska Pacific University Consortium Library like a pearl in an oyster. A treasure trove of thousands of books, hundreds of periodicals, voluminous reference and research materials, maps, atlases, and documents from eight federal and state agencies fill the shelves. Science kits of skulls, fur, small mammals, and bird mounts are also available for check-out. If ARLIS's collection isn't enough to search through, ARLIS can get materials from other Alaska libraries through inter-library loan requests.

ARLIS's new BLM librarian, Leslie Champeny, said the science kits surprised her most out of all the library's materials. Champeny said, "There are a couple of small mammal mounts in addition to lots of birds. Furs and skulls are from a variety of land and sea animals, from wolverine to polar bear, sea lion and sea otter."

ARLIS collections are available on its Web site: <http://www.arlis.org>. This resource can be invaluable for researching and gathering information. Several of the 700 journals ARLIS subscribes to are also available on-line. If the site lists the journal name in bold, it is a live link to the complete on-line journal and its Web page. Champeny said they are in the process of revising the ARLIS Web site and are excited about a new look in the near future.

The public can check out materials for up to four weeks with an Alaska or ARLIS library card, place inter-library loan requests, or use reference materials. ARLIS is a member of the Alaska Library Network. An ARLIS library catalog search will also search the Consortium Library, Anchorage municipal libraries and the WorldCat catalog of global library resources.

The library staff is available Monday through Friday, 8 a.m. to 5 p.m. The library is also available unstaffed whenever the Consortium Library building is open.

Champeny said, "Parking for ARLIS visitors can be free, but it is subject to the University's parking enforcement." Champeny explains, "First-time visitors should go to the ARLIS Reference Desk for instructions on free parking during their future visits to ARLIS." Founder agency employees should call the ARLIS Reference Desk at 907-272-7547 for parking information before they visit the library. Free parking and a shuttle is also available at University Center.

The parking issue is a small inconvenience compared with the values people find at this resource; just add a few extra minutes to your plans to find a parking spot. ARLIS is a repository of government and scientific information not available elsewhere. It is a gem available to all Alaskans by car, by phone, by Internet or inter-library loans.

— Pam Eldridge  
[pam\\_eldridge@blm.gov](mailto:pam_eldridge@blm.gov)



(left to right) The ARLIS management staff: BLM Librarian Leslie Champeny, Collections Development Celia Rozen, Team Librarian Tina Huffaker, Reference Services Coordinator Carrie Holba, Systems Coordinator Steve Johnson.

As a cost-saving effort in 1997, eight state and federal agencies pooled their individual libraries to create ARLIS and to provide easier access to agency materials.

The founder agencies are:

- Bureau of Land Management
- U.S. Fish and Wildlife Service
- Minerals Management Service
- National Park Service
- U.S. Geological Survey
- Exxon Valdez Oil Spill Trustee Council
- Alaska Department of Fish and Game
- University of Alaska Environment and Natural Resources Institute
- University of Alaska Anchorage and its Consortium Library



# FRONTIERS *Flashes*

News from around Alaska

## BLM-Alaska Issues National Petroleum Reserve-Alaska oil & gas leases

The BLM has received the final payments on high bids made by Anadarko Petroleum Corporation; ConocoPhillips Alaska, Inc., Petro-Canada (Alaska) Inc.; and FEX L.P. for tracts within the National Petroleum Reserve-Alaska during BLM-Alaska's Sept. 2008 lease sale.

"The BLM is encouraged by the commitment of these companies to energy production in the National Petroleum Reserve-Alaska," says BLM-Alaska State Director Tom Lonnie.

Petro-Hunt, L.L.C., was the high bidder on 72 lease tracts (822,151 acres) for \$13,730,603. The company relinquished all its bids after notifying the BLM in late December that falling oil prices made it uneconomical for it to pursue oil production in the National Petroleum Reserve-Alaska at this time. The company forfeited its deposit of \$2,746,154.

Leases were issued to the following:

| COMPANY                               | LEASES | ACREAGE | TOTAL HIGH BIDS |
|---------------------------------------|--------|---------|-----------------|
| Anadarko Petroleum (100%)             | 1      | 11,416  | \$285,400       |
| ConocoPhillips (100%)                 | 33     | 314,670 | \$7,024,727     |
| Petro-Canada (100%)                   | 17     | 194,073 | \$1,304,463     |
| FEX L.P. (100%)                       | 11     | 125,415 | \$4,020,360     |
| Anadarko (50%),<br>Petro-Canada (50%) | 13     | 154,607 | \$3,741,796     |
| FEX L.P. (60%),<br>Petro-Canada (40%) | 3      | 34,242  | \$854,457       |

Each of the companies paid the BLM the balance of the bid, annual rental and processing fee on their leases. The leases are for 10 years.

Find out more: [http://www.blm.gov/ak/st/en/prog/energy/oil\\_gas/npra.html](http://www.blm.gov/ak/st/en/prog/energy/oil_gas/npra.html)

## Winter trail-based events impact wellness

Iditarod National Historic Trail administrator and BLMer Kevin Keeler was a featured speaker at "The Impact of Trail Events – Alaska to Texas" at the Nov. 15-18, 2008, National Trails Symposium held in Little Rock, Ark. Keeler discussed how winter trail-based competitive events in Alaska relate to community wellness, especially in rural communities. He also explained how organizing events on the trail, marketing and media coverage can make a tremendous difference in gaining public awareness and support.



## North Slope Science Initiative (NSSI) sponsors scientific meetings

The United States and Canada Oil & Gas Research Forum held Oct. 27-30, 2008, in Anchorage exceeded expectations with more than 240 participants representing industry, government agencies, non-government organizations, the North Slope Borough, and indigenous people from both countries. The forum addressed technical and engineering, socio-cultural, biological, and physical sciences research and research needs across Alaska's North Slope and Canada's McKenzie Delta. NSSI was one of the major sponsors of the forum.

The NSSI was also a sponsor of the **North by 2020 International Polar Year workshop** held Nov. 12-14, 2008, in Barrow's Arctic Research Center. This workshop focused on reducing environmental risks and impacts in Arctic coastal and offshore oil and gas development activities. NSSI director John Payne presented information about the NSSI at the workshop.

## Public Radio International spotlights Iditarod National Historic Trail

The Iditarod National Historic Trail was featured in the Dec. 22 edition of Public Radio International's "The World," a one-hour weekday news magazine. The producers interviewed Iditarod Trail Administrator Kevin Keeler for the "Geo Quiz" segment of the program, which tests listeners' knowledge of world geography. Keeler introduced listeners to the rich history of the Iditarod National Historic Trail, including the 100th anniversary of the Christmas Day gold strike of 1908 in the Iditarod gold fields. The broadcast is available via podcast for two years. Under the National Trails Act, the BLM is the designated Trail Administrator. BLM-Alaska maintains about 150 miles of the Trail, including four public shelter cabins. Most of the remainder of the Trail is managed by the State of Alaska, or crosses private Native lands on public easements.

For more information visit <http://www.pri.org/> and <http://www.blm.gov/ak/st/en/prog/sa/itarod.html>



## Abandoned mine shaft filled with foam

*At this bubble bath, snow provided the only water, and rubber duckies were nowhere to be found...*

On a chilly October morning, seven BLM Fairbanks District Office employees built a pile of fluffy polyurethane foam to seal a dangerous mine shaft near the headwaters of Big Eldorado Creek, north of Fairbanks. Constructed in 1945, the approximately 30-foot-deep shaft was open and unsecured, with only a protective steel culvert added in the 1990s to keep people or animals out.



Pouring foam as crew watches — about 3 feet more to go.

Justin Ireys, an engineer with the Alaska Department of Natural Resources' Abandoned Mined Lands program, provided technical expertise to the BLM crew. The National Park Service donated the foam. With Ireys' assistance, the crew constructed a false bottom of lumber and chicken wire in the shaft to hold the foam until it solidified. They then mixed dozens of bags of yellow foam and poured them in to fill the shaft.

Ireys has coordinated several mine closures using foam. He said the foam would provide a stable plug for the shaft while reducing the project's cost. The foam eliminates the need to rent heavy equipment to fill the shaft with rock and dirt.

Next summer, the BLM will cover the foam plug with a protective earthen cap that will divert rain and snowmelt around the shaft and allow plants to grow and cover the site.

Find out more: <http://www.abandonedmines.gov/ram.html>

— Craig McCaa  
[Craig\\_McCaa@blm.gov](mailto:Craig_McCaa@blm.gov)

## Three BLM land use plans to include geothermal leasing

The BLM released a national programmatic environmental impact statement in December 2008 for geothermal leasing. Although BLM-Alaska has not received an application to develop a geothermal area, the approved EIS amends the Ring of Fire, Kobuk-Seward Peninsula, and Central Yukon resource management plans to allow the BLM to process geothermal leasing applications in any of these three planning areas. For more information on the geothermal energy program and this environmental impact statement, visit [http://www.blm.gov/wo/st/en/prog/energy/geothermal/geothermal\\_nationwide.html](http://www.blm.gov/wo/st/en/prog/energy/geothermal/geothermal_nationwide.html)

## Winter Trails Day is coming to Campbell Tract

*Experience the great outdoors! February 14, 10 a.m. - 4 p.m. (last gear check-out 3:30 p.m.)*

Winter Trails Day is an annual event most folks within driving distance of the BLM's Campbell Tract in Anchorage will not want to miss! The event features free use of cross-country skis, skate skis, and snowshoes (provided by REI), a GPS navigation and geocache activity; and a self-guided snowshoe hike. If that doesn't sound like enough fun, there are several clinics available on topics such as winter camping, avalanche beacons, snow shelter construction, skijoring, winter mountain biking, and ski-waxing. Thaw out and relax after your adventures with complimentary hot chocolate, coffee, cookies, donuts and marshmallows for roasting. Best of all, it's all free!

Inside the Campbell Creek Science Center, you can typically encounter representatives from Alaska Mountain and Wilderness Huts Association, Alaska Trails, Anchorage Equestrians, Anchorage Scoop the Poop Committee, Anchorage Skijor Club, Chugach National Forest Avalanche Center, Friends of Bicentennial Park, Municipality of Anchorage Trail Watch, Nordic Ski Association of Anchorage, REI, Singletrack Advocates, and more.

Winter Trails Day at the BLM Campbell Tract now attracts close to 1,000 visitors of all ages, thanks to the support of our many volunteers and partner organizations. Come join us!

[http://www.blm.gov/ak/st/en/prog/sciencecenter/special\\_events/winter\\_trails\\_day.html](http://www.blm.gov/ak/st/en/prog/sciencecenter/special_events/winter_trails_day.html)



Young snowshoer taking a break at Winter Trails Day.

Thom Jennings



Subscribe (free) to BLM-ALASKA FRONTIERS. Future issues will be e-news online for viewing or downloading. Printed copies will be mailed out only by request.

Please mail, fax, or e-mail us for your FREE subscription.

☐ **Notify me when FRONTIERS is online.**

(Please fill out your e-mail address below — print clearly)

☐ **Mail me the print version of FRONTIERS 4 times a year.**

Fill out if different from the address label on the back of this form and send by one of the methods below.

Name: \_\_\_\_\_

Street/Box: \_\_\_\_\_

City: \_\_\_\_\_ State/Zip: \_\_\_\_\_

**Mail or e-mail:**

Editor, BLM-ALASKA FRONTIERS

Office of Communications

Alaska State Office - AKSO 912

Bureau of Land Management

222 West 7th Avenue, #13

Anchorage, AK 99513

FAX: (907) 271-5421

E-MAIL: karen\_laubenstein@blm.gov

PRIVACY ACT NOTICE: BLM-Alaska. This information is collected to update our existing mailing list. All information collected will be used only for that purpose and under existing Privacy Act of 1974 (U.S.C. §552 as amended) guidelines.

## Frontiers Flashes

— continued from page 14

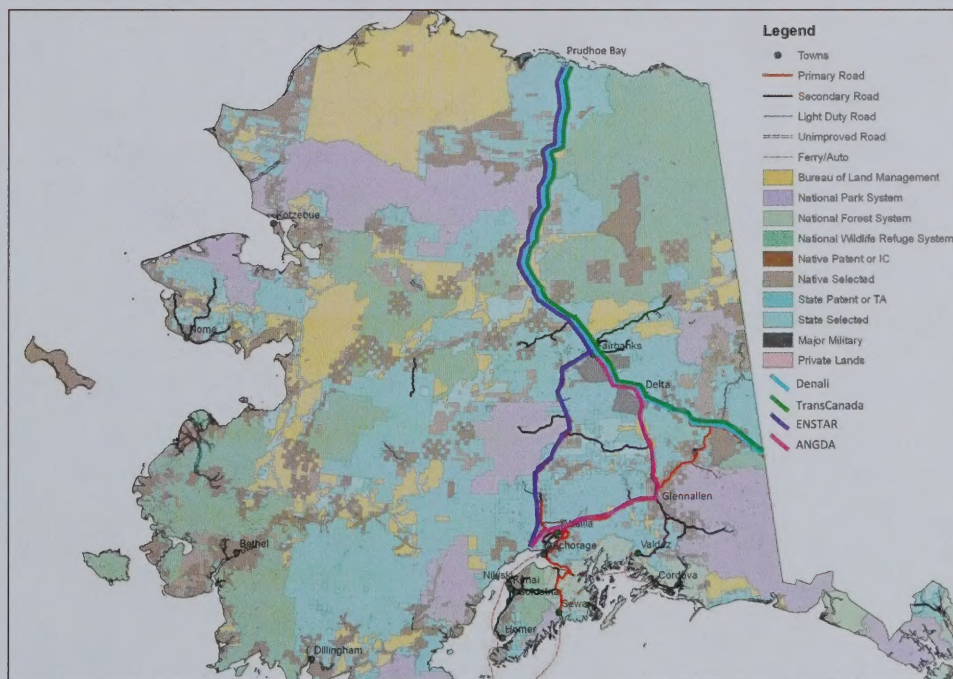
### Joint Pipeline Office News

**Trans-Alaska Pipeline System Strategic Reconfiguration Project work continues:** Work at Pump Station 4 is now expected to be completed in April 2009. For an overview of the reconfiguration project, see BLM-Alaska Frontiers Issues 101 and 102.

### Trans-Alaska Pipeline System shuts down for six hours due to weather.

For only the second time (the first was in 2006), the Trans-Alaska Pipeline System was shut down on Monday, Dec. 29, at 6 p.m. until Tuesday, Dec. 30, at 2 a.m. due to weather. Tankers can't be loaded when bad weather makes deploying a boom around docked tankers too dangerous, or when waves slosh over the boom, rendering it ineffective for containing a spill. BP, ConocoPhillips, and Exxon each operate a fleet of double-hulled tankers that haul oil from Valdez to West Coast refineries.

**Natural gas pipeline companies working closely with the Joint Pipeline Office and BLM-Alaska.** The BLM's primary role in the gas pipeline projects is to participate in environmental analyses and grant rights-of-way across federal land in Alaska. The transport and marketing of Alaska's natural gas has been a 30-year



**Land status map with overlay of the proposed routes of the Alaska Natural Gas Pipeline and bullet lines as of January 2009. Applications, proposals, and permitting are being reviewed.**

goal of the State of Alaska, the federal government, and industry. Currently there are four proposed natural gas pipelines in Alaska. These include two major pipelines to transport the natural gas from Alaska to the Lower 48 proposed by TransCanada Alaska pipeline and Denali — The Natural Gas Pipeline; and two in-state pipelines,

the Beluga to Fairbanks (B2F) spur pipeline and the Enstar bullet line to serve Southcentral Alaska.

For more information visit:  
[http://www.blm.gov/ak/st/en/prog/energy/oil\\_gas.html](http://www.blm.gov/ak/st/en/prog/energy/oil_gas.html)





Office of Communications  
Alaska State Office  
Bureau of Land Management  
222 W. 7th Ave., #13  
Anchorage, AK 99513

OFFICIAL BUSINESS

## FIRST-CLASS MAIL

Postage & Fees Paid  
U.S. Department of the Interior  
Bureau of Land Management  
Permit No. G-76

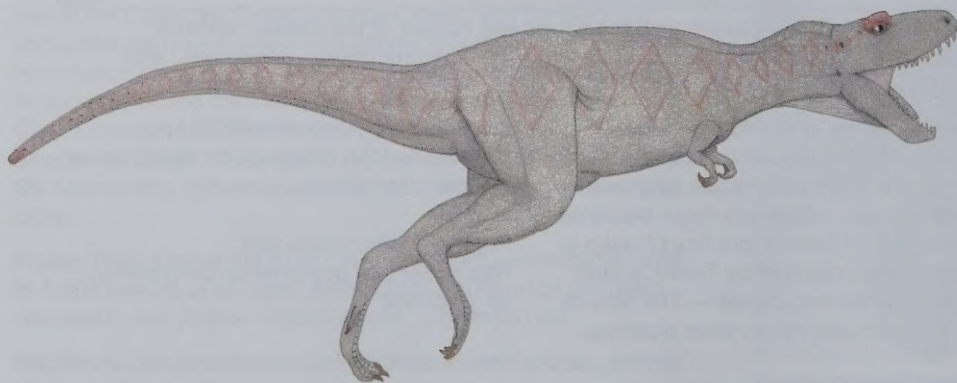
BLM Library  
Denver Federal Center  
Bldg. 85, OC-521  
P.O. Box 25047  
Denver, CO 80225

### BLM-ALASKA FRONTIERS... Look for it in our next issue!

#### North Slope Dinosaurs are International Stars

In October 2008, the Public Broadcasting Service's popular science show "Nova" broadcast an "Arctic Dinosaurs" segment about two recent paleontological expeditions to the Colville River on Alaska's North Slope. "Dinosaurs on Ice," another documentary about the same topic, aired on the Australian Broadcasting Corporation last July. Arctic Field Office archaeologist Michael Kunz, who was involved in permitting the two television projects, made a brief appearance in the Australian program. Read more about how ongoing research on the Colville River is reshaping our understanding of dinosaurs and climate change in the next issue of Frontiers.

— Craig McCaa  
[Craig\\_McCaa@blm.gov](mailto:Craig_McCaa@blm.gov)



#### BLM-Alaska Frontiers

##### Managing editor

Karen J. Laubenstein, (907) 271-3318  
[karen\\_laubenstein@blm.gov](mailto:karen_laubenstein@blm.gov)

##### Contributing writers

Pam Eldridge  
Caron Gibson  
Robert King  
Craig McCaa  
Teresa McPherson

##### Photographers

|                      |                |
|----------------------|----------------|
| Pam Eldridge         | Craig McCaa    |
| Ruth Gronquist       | Arnold Newman  |
| Thom Jennings        | Yoichi Okamoto |
| Karen J. Laubenstein | Sue Steinacher |

##### Design/Illustration

Vanessa Rathbun

BLM-Alaska Frontiers is published quarterly in March, June, September and December. Deadline for articles is the third Friday of the month before publication. The deadlines will be Feb. 20 (Spring 2009), May 15 (Summer 2009), Aug. 22 (Fall 2009), and Nov. 20 (Winter 2009).

BLM-Alaska Frontiers may contain copyrighted material that is used with permission of the copyright owner. Publication in a Government document does not authorize any use or appropriation of this copyrighted material without consent of the owner and they are not in the public domain. Any text and photos without attributed copyright may be reproduced in whole or in part as they are in the public domain. Please credit BLM-Alaska.  
BLM-AK-GI-94-005-1120-912